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The impact of training, of application and of time on negotiator styles.

**An identification of negotiator styles and an analysis of
their evolution
due to the impact of training, to the passage of time and
to workplace
application; a longitudinal study.**

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An identification of negotiator styles and an analysis of their evolution due to the impact of
training, to the passage of time and to workplace application; a longitudinal study.***

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Abstract:

This article presents a subset of a research work on the enhancement of cooperation in negotiation with a focus on the intra-organizational context. This article focuses on identifying negotiator styles and tests the impact of three variables on their performance and evolution. The variables considered are the impact of negotiation training, the organizational environment and the impact of time. We choose a qualitative approach over two cycles of action research. Cycle one, performed via training method with 64 individuals, over a period of 6 months; cycle two, using the focus group method with 10 individuals, over a period of 12 months. This experiment, which took place in Egypt, enabled us to propose a dynamic typology of negotiation styles, which in turn enabled us to propose a number of organizational recommendations to better integrate negotiation processes in their working habits.

Keywords:

Negotiation, typology, evolution, training, time, workplace application, Egypt

Introduction

Organizations strive for excellence through continuous improvement of all their means of performance. Among the pillars to this objective is negotiation. The review of literature supports the fact that negotiation helps to manage conflicts and thus improves inter-organizational relationships, which in turn impacts performance positively (see below). To face this challenge, organizations invest time and money in the training of negotiation teams (or individual negotiators). As for negotiation theory, the diversity of profiles is not related to behaviors or negotiation tactics in a satisfactory way. Most of the existing research only considers a cooperative vs competitive style.. It is therefore worth investigating what is the impact of the abovementioned training efforts, as well as to attempt to better capture the diversity of negotiation styles.

Our objective is thus to address these issues, so as to identify and study different negotiator profiles and their potential evolution under the influence of three variables:

- 1- Negotiation knowledge increase through training.
- 2- Interaction of this new knowledge with organizational processes once the trainee returns on the work place.
- 3- The passage of time.

In other words we are asking ourselves what are the already existing negotiator profiles in the organization? What does the increase of negotiation knowledge do to the negotiator's style? How do the organizations impact these styles post training? And what is the impact of time (longitudinal study) on the newly evolved negotiation styles? Versus how should the organization manage these profiles to capitalize on the benefits of each style?

We assume that by a better understanding of negotiation styles, organizations can better manage their negotiation processes and maximize on the potential of the different possible styles. The objective of our study of negotiator profile is the enhancement of negotiation performance and results. We have a specific interest for cooperative negotiation and for its value on the organizational environment, specifically within an intra-organizational context. We start with a review of literature (1) and then present our methodology (2) and results (3). We conclude (4) by describing how our results contribute to the understanding of negotiator profiles and behaviors. We also develop on the original aspects of our work and suggest leads for future research.

1. From the Organization Level to the Negotiator's Dilemma

In this section, based on our review of literature, we briefly define organizations so as to understand what is cooperation within organizations (1.1). We then present the determinants of cooperation and the negotiators' dilemma, from an organizational perspective (1.2.) before we dedicate our attention to the factors which impact negotiator decision processes and behaviors (1.3).

1.1. Defining Organizations and Cooperation Within Organizations

Scholars and business professionals alike have long recognized that cooperation is a key component of organizational success. Organizations themselves have long been conceptualized as systems of cooperative effort and coordinated activity (Barnard, 1938). Based on this understanding, an organization can be described as a group of people working together, with complementary skills, to achieve a common goal. This description leads us to assume that, in these systems, leaders and members of work groups are judged by how well they cooperate to deliver the results organizations and their environments demand. Those who adeptly develop and help others to develop cooperative relationships are poised for success, as are the organizations

that employ them. Yet, despite how important and rewarding cooperation can be, evidence suggests that it continues to evade many organizations. There is a clear and strong need for research illuminating “the conditions that give rise to naturally occurring cooperation” in organizations (Smith et al, 1995).

While some researchers focus on individuals’ motives for working together when they define cooperation (Mead, 1976), others focus on relational behaviors, such as exchanging and combining information, ideas, and other resources; giving assistance or helping; constructively discussing problems and conflicts; and supporting and encouraging each other (Argyle, 1991; Tjosvold, 1998). Cooperation is a social behavior. When people cooperate, they act in ways that advance or potentially advance each other’s interests. Sometimes they benefit personally, and sometimes they do not. Cooperation may fall within or extend beyond job roles (Milton, et al., 2005).

Before going any further let us define cooperation in the organization. According to Asgner (1995) workplace cooperation has been conceptualized as the willful contribution of employee effort to the successful completion of interdependent organizational tasks. Identifying the conditions under which members are likely to display cooperative behavior is difficult but let us note that, cooperative behavior is often manifested in members' willingness to work with others, even when it is not formally demanded. It also shows as a preference for being rewarded for working in groups rather than alone (Wageman, 1995) .Cooperative behavior can be influenced both by personality, or one's tendency to pursue individualistic or collective goals (McClintock and Liebrand, 1988), and by formal and informal control systems that reward individual achievement or cooperative efforts (Petersen, 1992; Chatman, 1995).

The literature above supports the idea of a relation between cooperation and organizational performance. The latter can be attributed to the amount of co-operation between participants. The less cooperation there is, the poorer organizational performance would be. What is less clear, however, if co-operation is indeed a key success factor, is what are the underlying factors and critical processes that lead to co-operation? (Phua, 2003). We focus on the micro level co-operation of individuals that contributes to organizational success.

1.2. An Organizational Perspective on the Determinants of Cooperation and the Negotiator's Dilemma

It is important to point out that cooperation usually involves not only coordination of activities but also the sharing of benefits that are derived from cooperation (Deutsch, 1949). According to Axelrod (1984), parties engaged in a cooperative relationship are influenced by the 'shadow of the future' in that they treat each other in ways as though their future relationship mattered. In addition, from the economic exchange perspective, the degree of individual cooperation is usually seen as a function of the extent to which the benefits of cooperation exceed the costs. Viewed in this context, the overarching assumption is that individuals' tendency to cooperate and continue to engage in cooperative relationships are underpinned by conscious and calculated, rational reasons (Williamson, 1975). Well-established micro perspective reasoning stems from agency theory, which is concerned with the creation by the 'principals', of systems of monitoring, sanctioning and surveillance in order to ensure employee or 'agent' cooperation and compliance (Pratt and Zeckhauser, 1985).

In the 1990s scholars have given considerable attention to the importance of increasing the level of interpersonal cooperation and teamwork in organizations. The increased use of self-

managed work teams in organizations, combined with the elimination of middle management positions as a result of organizational restructuring, has highlighted the importance of interpersonal cooperation and teamwork for organizational effectiveness (Cohen, Ledford, & Spreitzer, 1996; Dunphy & Bryant, 1996). In addition, many researchers have argued that extra-role behavior and organizational citizenship behavior can be promoted by raising the level of cooperation (Katz, 1964; Organ, 1988; Organ & Ryan, 1995; Van Dyne, Cummings, & Parks, 1995). Others have argued further that the organizational capabilities that can give an organization a sustainable competitive advantage are embedded in the skills and knowledge of organizational members (Amit & Schoemaker, 1993) and in the interactions among them—particularly in groups and teams. As we noted earlier, scholars have widely acknowledged that trust can lead to cooperative behavior in organizations (Axelrod, 1984; Mayer et al., 1995; McAllister, 1995) (Gareth R. Jones et al. 1998). In other words, cooperation for organizations is more than a necessity; it has also become a competitive advantage for some.

Nevertheless, functional areas compete with one another in the pursuit of divergent individual goals and strategic priorities (Houston et al. 2001). They must also cooperate so that they work towards the firm's common interests (Narver and Slater 1990). Consequently, an organization's functional areas are often forced to compete and cooperate simultaneously with one another.

There is thus an organizational dilemma related to the tension between cooperation and competition (Lax and Sebenius, 1986). This tension occurs during individual interaction, known as relationships. At this individual level, relations are often framed by negotiations (Strauss, 1978). Most of the time, they contain a mix of competition and cooperation and involve choosing which strategy to adopt (Xueming et al, 2006). If not managed properly these dilemmas

may affect organizational performance. This leads us to investigate the decision processes and behaviors of negotiators.

1.3. Negotiator decision processes and behavior

Based on the above, the intra-organizational setting reality manages continuously the coexistence of the cooperative and the competitive decisions, behaviors and strategies. But do people favor cooperation or competition through a rational and conscious decision or based on their personality. This question and the ability of training to foster more adapted behaviors is a key issue in negotiation theory (Nadler, 2003, Taylor, 2008) but also in the professional literature (Susskind, 2004, 2006, 2008) and it points to training as a suitable way to introduce new knowledge. In this perspective, the principled negotiation model (Fisher and Ury, 1981), for instance, is clearly aimed at reframing the dilemma. But some questions remain: how do negotiation trainings affect actual behaviors? How are time and knowledge related to the negotiator's style? Is there really a one size fits all approach of negotiation or do contingencies play a role?

We thus dedicated our work to the identification and understanding of the different existing negotiator profiles. We then studied the influence of three factors on the evolution of these profiles. These factors are:

1. an increase in negotiation knowledge;
2. the type of organizational environment (supportive, or not of negotiation, and of what sort);
3. the impact of time after the increase in negotiation knowledge has taken place.

2. Methodology

In this section, we present our choice of a methodology (2.1.) and the design of our two research cycles (respectively 2.2. and 2.3.).

2.1 Choice of a Methodology

For this research, we adopted a longitudinal qualitative approach using some quantitative data to contextualize and help objectify the participants' behaviors and attitudes. Our approach could be qualified as action research as we both observe (and collect data) and act upon the research ground (Gilmore et al, 1986). Action research was first conceptualized by Kurt Lewin, for instance for the study of conflicts (1997). Nevertheless, action research may refer to a large spectrum of practices, considered as more or less scientifically rigorous.

Action research has many advantages, among them the chance to access real situations in a very open way. It is also criticized as leaving more subjectivity in the collection and analysis of research data. Moreover, the researchers have a dual position that may be contradictory. Thus, scholars have developed processes for "Action Research" to make it more acceptable. Since opening a debate on the issue is beyond the scope of this article, we will simply describe our research protocol. We refer to the model of Kemmis (1998) where research and action follow several cycles of four steps: plan, act, observe, and reflect. Ours includes two main cycles. What follows is a description of the overall process. Such aspects as bias management and coding protocols are described respectively in appendix 1 and 2.

2.1. Cycle One Field Work.

To explore the questions stated above, we conceived a training course on negotiation and used it to conduct a study on 64 professionals, based in Egypt, representing multiple educational backgrounds, and each working in a different industrial sector, over a period of six months. The

training was designed in order to address major shortcomings identified in the literature by Bazerman (2005), Lewin (1997) and Susskind (2004) and to take into account their “best-practice” recommendations. Appendix 3 summarizes the design and contents of this training. We tested and evaluated negotiation behaviors before, throughout and after the knowledge introduction, looking for behavioral change/development if any.

Thus the purpose of our work is to study the impact of the “knowledge” variable on behaviors, trying to identify patterns of behaviors from the data collected, leading to the appearance of categories of negotiator styles. To achieve the above we made sure that our field work methodology/tool enabled us to:

- identify original behavior (by original we mean the participant behavior before training knowledge impact);
- introduce structured knowledge, designed with specific purpose and bias management;
- identify, if any, occurrence of change, see if any modification on behavior happened.

In global our first cycle combined:

1. A training, in which the following tools were used:
 - profiling based on questionnaires (declarative method);
 - simulation games;
 - case studies;
 - individual presentations.
2. Observations during simulation games, by the researcher in charge of the training as well as by external researchers (for more details, please refer to appendix 1).

The consolidation of these forms gave us the description of the participants who joined our project. This is summarized in table (1). Table (2) provides examples of the types of negotiations the participants were involved in at work.

Insert table 1 about here

Insert table 2 about here

Figure (1) summaries the time-line and activities distribution of cycle one based on Lewin's work (1997).

Insert figure 1 about here

The whole cycle lasted 6 months. Pre-training evaluation was carried during the first two weeks. The training course was carried out over the next six weeks. After a two-week break, post training activities were spread out over the last 4 months.

The post training phase is very different from the pre-training one with regards to the duration and structure as well as to the increase of "dose" of reality. It uses at least one local context game, and real life professional material for training practice and application. We also investigated the question of how the training was perceived by the participants in terms of return on investment (ROI).

Exercises were of a varied nature, to avoid repetition, with the double objective of:

1. Evaluating information over the longer period to see the impact of the newly introduced knowledge via training, several months away from class, but still within a time frame which would make it interesting for the participants to report back.

2. Moving slowly but in a steady manner from class simulation games to real life information integration. In our case we were interested in asking the participants to develop a professional application inside their organization

2.2. Cycle Two Field Work

This is why we developed a second cycle for our research. Eleven persons out of the original sample of 64 were convinced to take part in a nine month follow-up in which we organized: a new profiling session, 3 individual meetings with each participant so as : prepare a real negotiation session, take part as an observer, debrief on the negotiation. We were not able to keep more than eleven participants out of 64 for two reasons. The first reason is that cycle 1, being six months long, already exceeded by far the length of any course the participants had during their MBA or DBA and was demanding a lot of effort from them. Not all of them volunteered for cycle 2. The second reason is that, due to the in-depth level of our follow-up and to the means at our disposal, twelve participants was the maximum we could deal with. As stated already, we ended up with eleven. To end the nine month follow up of cycle 2, each of the participants was requested to prepare a power point presentation to reflect on his performance as a negotiator, based on the negotiation we had observed. After this presentation a group discussion ensued with the eleven participants. In order to understand the meaning of comparisons between cycle 1 and cycle 2 results it is important to emphasize once again that we are selecting a subset of the cycle 1 sample for our cycle 2 study. This subset is made up of eleven out of the 64 people who took part in cycle 1. We followed-up these eleven people individually, to see how they evolved over cycle 2. We then compared the situation of these eleven people at the end of cycle 1, with the situation of the same eleven individuals at the end of cycle 2, allowing for the passage of time and immersion of the participants in the context of their

respective organizations. The validity of our comparison between cycle 1 and cycle 2 is thus valid for our limited sample for which we have longitudinal data over 2 cycles. Our ambition is not and cannot be to empirically test the validity of a given typology. Our aim is to identify which effects our three factors have on negotiator styles, in order to enrich existing frameworks of analysis through a qualitative, in-depth study of individual paths. For future research this will enable us to devise proposals which can be empirically tested in a quantitative manner. As such, for example, how many people end-up in each category of our typology, or the weight of each category is not the focus of our work, what counts is the nature of the categories which will emerge from our work.

To sum-up, in cycle two we collected data in the following way:

Declarative

- Face to face interviews
- Group interview (focus group)

Observation

- Ordinary real negotiations
- Case negotiation

These techniques were in particular suitable for two main reasons:

1. They are coherent with what we already did in phase one, to enable a continuum of knowledge building and comparison.
2. They enable verification and information triangulation of the participants' observed actions, with the participants' self perception of their doing.

Based on the literature review of how to construct a focus group we made the following choices, summarized in table (3).

Insert table 3 about here

What follows is an analysis of the results, presented in the same sequence as it was in the training.

3. Analysis of the Results

3.1. Cycle One Field Work.

Among the many results obtained from this field work cycle, we focus below only on the identification of pre and post training negotiator profiles.

At the moment of pre-training we managed to divide the participants into three groups:

1. Highly Competitive Individuals (A), these represented the largest portion of the population, and these:
 - 1.i. did not know about context analysis and appropriate strategy matching;
 - 1.ii. did not know that they can or should cooperate in certain situations;
 - 1.iii. did not know how to perform cooperation in negotiation;
 - 1.iv. many of them simply thought that their competitive strategies were actually cooperative. They had self awareness problems.
2. Highly Cooperative Individuals (B) these:
 - 2.i. were not proud for being cooperative, as if this is there is something wrong with them for being cooperative;
 - 2.ii. were un-confident and very reserved (did not speak or participate);

2.iii. versus the highly competitive, this group was very variable in their level of success in self protection in interaction with the more competitive individuals.

3. Free Style Individual (C), which represented a minority group:

3.i. this group was independent from character issues, they could chose and act cooperatively or competitively;

3.ii. they were the most at ease and active during the three phases of the training.

Before we move any further we need to elaborate on the emergence of this new category of Free Style negotiators. The literature offered multiple typologies which we have used to analyze the field work material in order to categorize our participants' behavior. What we found in the literature was a clear distinction between the cooperative and the competitive negotiation styles. However, during the post training sessions, observations were clearly indicating that some participants did not fit in any of the two categories. They were able to demonstrate an ability to use either cooperation or competition. These same issues emerged when we were analyzing the declarative material. We found a number of participants that did not have a consistent predominant cooperative or competitive negotiation style. They demonstrated a capability to use either strategy based on a conscious and intentional decision. For this group we created a new category, and we were interested in verifying its reliability during the second cycle of our field work.

Post training analysis and pre and post measurement show a non-uniform behavioral change. Table (4) summarizes these findings.

Insert table 4 about here

Knowing more about negotiation, about cooperation, knowledge regarding how, when, why, and with whom to cooperate did encourage all the participants to chose cooperation as a negotiation style when justified. For profile C, the overall negotiation success rate depended on their context analysis and strategy consistency, while profiles A and B depended on two additional more problematic issues:

1. Self awareness
2. Self control

Based on the above we tend to say that yes, negotiation knowledge increase does improve cooperation chances and improves management of the negotiator's dilemma. Based on the context, when appropriate, this raises the change for cooperation, which leads in its turn to the probability that the success rate of intra-organizational negotiations will improve. We define a successful negotiation as one which leads to a solution that will help an organization improve its performance.

This does answer our initial research question. But does it satisfy what we were actually looking for? Is the above conclusive with regards to knowledge impact on negotiators?

We found ourselves with many uncovered dimensions, related to:

1. Time impact: how do the styles evolve over a couple of months after the initial training
2. Uncontrolled environment impact: what happens when trainees leave the class environment, which is under the control of the trainer, back into organizational settings which were not controlled by the researcher?

Some of the results of cycle two of our field work bring answers to these questions.

3.2. Cycle Two Field Work.

At the individual level, we found that the effects of the training were lasting. There still was a positive effect of how the knowledge from training impacted on negotiation performance. We also made new findings as regards the previously identified typology, which is enriched when the variable “real working setting” is introduced.

We choose to represent our findings individual per individual by describing our observations and comparing them with the participants self perception. We also assessed whether, with the passage of time, the gap between our observations and self perceptions were closing or widening. This is summarized in table (5).

Insert table 5 about here

Building on the phase one field work typology, the above leads us to revisit our typology and refine it in order to better define our participants at the end of cycle two (table 6).

Insert table 6 about here

In order to make the table 5 clearer, it is important to define the terminologies used:

1. Cooperative principled. Negotiators who belong to this category succeed in following the “principled negotiation” style, defined by the work of Ury and Fisher (1991).
2. Cooperative incoherent. Negotiators who belong to this category are cooperative individuals who lack the appropriate supportive body language, which usually results in intending one strategy but giving the impression of a different one. In other words, body language and intention are not aligned.

3. Cooperative vulnerable. Negotiators who belong to this category still naturally apply the cooperative style without context analysis or suitability. This turns them every time into victims of cooperation.
4. Competitive acknowledged. Negotiators who belong to this category are conscious of their competitive behavior and of its limitations.
5. Competitive deceived. This category, the contrarily to the one above is made up of competitive people who do not know admit it. They live in the idea that they are cooperative, which is far from being what we observed.
6. Free style logic based. Negotiators who belong to this category demonstrate the ability to cooperate or compete, and to decide which style to choose, based on context and relational analysis.
7. Free style emotion based. Negotiators who belong to this category demonstrate the ability to cooperate or compete. Their decision as to which style to choose is not based on the context or relational analysis, but on emotional factors. If they like the other party they will cooperate, if they incur any negative feeling toward the other or the topic they will compete, regardless of the context and the consequences.

4. Contribution of the Research to the Understanding of Negotiator profiles and Behaviors.

Based on the cycle one field work, we were already capable of identifying three groups of individuals and the resulting material from cycle two draws on how the intra-category develops. The additional work enabled us to see inside of each group and detect behavioral difference related to the individual path identification we tried to trace in contrast with the phase one collective training and collective results obtained. As we can see from table (6), each category developed sub-possibilities. It is no longer a matter of being cooperative or competitive, or

capable of both. But aspects of self-awareness, capacity of application and attitude/strategy compatibility show that succeeding in negotiation behavior is more than a question of know-how, but also one of practice.

This has implications for training design and supports the interest of a three phase training following Lewin's (1997) learning theory. None of the participants returned to pre-training status. By this we mean there was no knowledge regression. Moreover, none of the participants changed category either but moved into subcategories based on factors described above such as self-awareness and capacity of application. Individuals do not depart entirely from their nature, whatever the construct of this nature is. Whether this is good or bad is not for us to judge, but this information enables organizations as well as training developers to place realistic expectations on their staff/participants.

Regarding negotiation styles, in the cooperative – competitive dilemma, we offer detailed subcategories (that may still be completed). It appears that each main category has its own unique problems. For example, vulnerability is unique to cooperation. Another example is how the emotional bases of negotiation decision are unique to free style negotiators. We do not mean here that emotions play no role for other styles but that some free style negotiators will chose between competition and cooperation based only on emotional factors. Since other styles are either locked into a competitive or a cooperative dominance, emotions do not play a role in choosing a style for these other categories.

Further research is needed to refine and confirm the typology and the associated performance. Many researchers have tried to identify if cooperation was, overall, more or less efficient than competition. Through the identification of the free-style type and through our subcategories for each style, we offer new perspectives on this question. Even Xueming et al. (2006)

who emphasize the simultaneity of cooperation and competition within firms (coopetition) do not explore this at an individual level as it was done in our research.

We also identified the importance of self-awareness and the fact that it was clearly related to the three levels of training skills (knowing, applying, being aware). As a consequence the design of training may not only need to be adapted to original styles but also to the degree of self-awareness of the participants. Self-awareness could be a prerequisite or, on the contrary, the main goal of some training sessions.

To conclude we want to stress that this study is based on business people rather than on students as research subjects. Part of the research also includes observation of the participants in their real professional environment. We also had the chance to follow them in a longitudinal way and see how cooperative behaviors, but also the relevance of a cooperative behavior, can be assimilated in a professional context. Finally, much of the literature relates to studies conducted in countries such as China, Pakistan, South Korea, Japan, France, and the United-States (Agndal, 2005). This is the very first study conducted in Egypt. Therefore, a lead for future research would also be to replicate this research in different contexts so as to identify what cultural issues are at stake.

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Table 1, Participants Variables

Number	64
Gender distribution	44 males; 20 females
Age group	From 25 to 50 years old
Undergraduate	Engineering, Art, Languages, Commerce, Business Administration, Medicine, Logistics, Veterinary, Sociology, Computer Science, Pharmacy and Military
Graduate	Specialized Diploma, MBA (master of business administration), DBA (doctorate of business administration)
Working Sector	Pharmaceutical (multi-national, national and governmental firms); Academics; Consultancy (finance and marketing); Construction; Real Estate; Soft ware development firms; Telecommunication; Credit; Banking; Government Authorities; Petroleum; Non Profit Organizations; Import and Export firms and finally Automotive

Table 2, Examples of negotiations the participants were involved in

Sector	Negotiation topic
National Distributor, pharmaceutical	Negotiation between a participant and her top manager on the redesign of the distribution chain.
Multinational, pharmaceutical	Negotiation between the participant and his direct senior management on the introduction of specific creative ideas for a product launch.
Multinational, petroleum	Negotiation of annual appraisal with two level supervisors.
Consultancy	Acceptance of a new segment of client as a response to market needs.
Real estate	Change in company rules and/or interpretation of rules to secure a contract with a major client.
Software development	Negotiation on the renewal of a contract with a major partner encountering difficulties.
Pharmacy, business owner	Negotiation with a partner so that he keeps a stake in the business instead of closing it and travelling abroad.
Telecommunication	Negotiation of a manager on the upcoming goals of his team-members.
Banking	Negotiation of annual appraisal with direct supervisor.

Table 3, Focus Group Summary

Element	Focus group
Format	Group session
Size	11 per session
Length	1.5 to 2 hours
Number of sessions	3 (plus the one2one on the job observation)
Participants	<ol style="list-style-type: none"> 1. Selected; by invitation 2. Similar characteristics
Forms of data	<ol style="list-style-type: none"> 1. Conversation, including tone of voice 2. Silences (words and issues) 3. Body language
Data collection	<ol style="list-style-type: none"> 1. Transcribe
Moderator	<ol style="list-style-type: none"> 1. flexible yet focused 2. uses interview guide; modified based on early session
Formats for reporting	<ol style="list-style-type: none"> 1. selected quotations 2. analysis of repeated themes

Table 4, Summary of phase one post training results

PROFILE	Post Training Changes
A- competitive negotiators	<ul style="list-style-type: none"> a) become more aware of the existence of the cooperation norm in themselves, which is, to them, a major achievement b) they become more context oriented, not character based c) demonstrated the willingness to cooperate, even if they vary in level of capacity of application d) varied in their capacities to overcome self awareness problems, but became more aware of their style limitations
B- cooperative negotiators	<ul style="list-style-type: none"> a) felt more proud and open about their cooperation values b) become more confident in their participation and felt free to participate c) improved their skills at context analysis d) recognized the need to compete in specific contexts
C- free style negotiators	<ul style="list-style-type: none"> a) as mentioned above they are the most at ease, we see them to be the ones to have most benefited from the training b) they became more context oriented, which means that while they were independent from character pressure to choose either paths, they now have the constraint of the context analysis results to enable them a more rational choice c) demonstrated a high level of both paths usage, with obvious preference for the cooperative scenarios d) they were also demonstrating some sympathy toward the profiles A & B for their limitations (in being locked into one style only). e) their overall negotiation success rate depended on their context analysis and strategy consistency

Table 5, Participants Behavior Consolidation

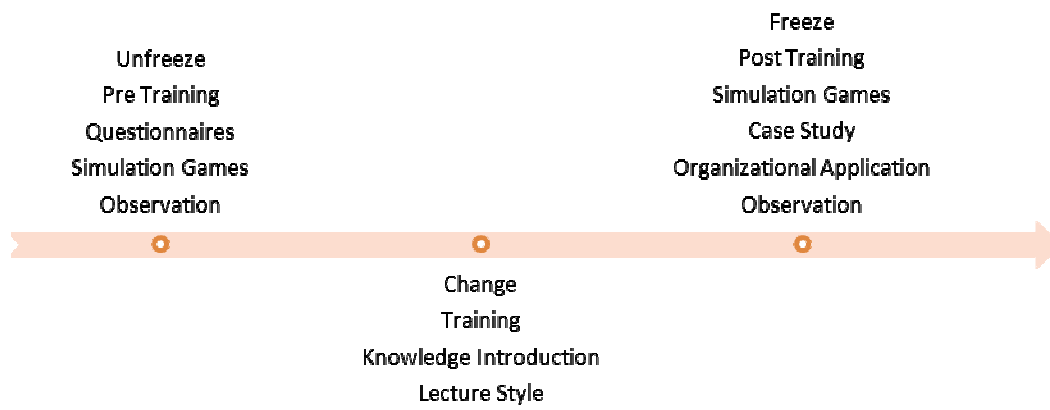
	Individuals	Behaviors based on researcher's observation	self perception/ observer: gap
1	SB	Naturally cooperative – found more balance, prefers principled cooperation	Closing
2	MR	Naturally competitive – <ul style="list-style-type: none"> • Easy to compete • When cooperating unable to match intention with actual action 	Closing
3	OM	Free style – found logical reasoning and support to his strategy decisions	Closing
4	MN	Naturally cooperative –when cooperating unable to match intention with actual action	Opening
5	EM	Naturally cooperative – vulnerable cooperative	Closing
6	HR	Naturally cooperative – vulnerable cooperative	Opening
7	SA	Naturally cooperative – found more balance, prefers principled cooperation	Closing
8	MF	Free style – emotional dominant	Opening
9	YO	Naturally cooperative –when cooperating unable to match intention with actual action	Closing
10	IS	Free style – found logical reasoning and support to his strategy decisions	Closing
11	ST	Naturally competitive – character dominance	Closing

**closing means: admits and approves our analysis; and opening means: the gap between our perception of this person and his/her own perception are very different, the individual refuses to agree with or see what we are saying of him or her.*

Table 6, Typology revisited at the end of cycle two

	Profile	Type	Individual
1	Cooperative	Principled	<ul style="list-style-type: none"> • SB (1) • SA (2)
		Incoherent	<ul style="list-style-type: none"> • YO (3) • MN (4)
		Vulnerable	<ul style="list-style-type: none"> • EM (5) • HR (6)
2	Competition	Acknowledging	<ul style="list-style-type: none"> • MR (7)
		Deceived	<ul style="list-style-type: none"> • ST (8)
3	Free style	Logic based	<ul style="list-style-type: none"> • OM (9) • IS (10)
		Emotion based	<ul style="list-style-type: none"> • MF (11)

Figure (1), Cycle One Field Work



Appendix 1 - Managing diversity and possible bias in the research

It is important to comment on the diversity that was represented in our participants. The diversity of gender, education, working sector; all these variables were taken into consideration and eventually proved, within the limitations of our sample, not to have any impactful value.

Field Work Bias Management

Bias resulting from field work design was given considerable attention. This bias could have dominated the validity of our results. For that purpose we dedicated this appendix to explain how we identified and managed these biases.

We categorized the sources of bias as follow:

1- Participants bias.

Previous education. To overcome the possible bias coming from a specific educational background, we made sure that our groups of participants, in the experiments came from different educational backgrounds.

Working sector. The same rule applied to this point, which means, that in order to overcome the possible impact of specific work field cultures on our experiment, we also made sure that our group of participants represented a diversity of work sectors.

Current education. Since our participants are all MBA and DBA students, there was a worry that a specific course might impact our results without us being aware of it. For that purpose we also scheduled our training (the introduction of knowledge) between two semesters in order not to allow for such a bias.

The participants were all volunteers and no financial reward was involved

2- Researcher/instructor bias

The researcher/instructor was not allowed to explain the questions, not even the linguistic aspect of them. This was done in order not to impact the understanding of the others and in order not to create variable intervention levels on the participants' perception of the questions or on how they should behave.

External neutral observers were invited during the assessment phases to overcome the lonely research perception bias, for quality control. All in all we had two observers, both PhD students in the French doctoral cycle, and also teacher assistants at the French University in Egypt.

3- Training design bias.

Many constraints have been put in the training design to avoid falling in a bias entrapment. We list the major ones below:

- participants were requested to fill the questionnaires isolated from each other not to influence each other;

- pre training profiling (will be explained shortly) had to be completed before any training information was introduced, to avoid confusion about the source of the behavior;

- communication between participants in this phase was not allowed, individuality was very important;

- language bias was also a problem, this is why one of our training prerequisites from the participants was to have obtained the TOEFL;

- invisible relationship impact was also a problem, re-training relations could impact behaviors in unexplained ways, such as husband and wife, brothers, friends, and the like; to control this possible bias, this type of relationships was identified prior to the training, and these individuals were not allowed to co-work together in the assessment activities;

- certain assessments were very personal and required a level of trust so that the participants would fully cooperate. In order to overcome shamefulness and information control problems from the participants, the confidentiality of these assessments was clearly announced;

- also to overcome the heat of information evaluation on the spot, we designed the training impact evaluation to be performed over four months once every four weeks, and this exercise got repeated four times;

- we also addressed the bias potentially resulting from the class room environment; by which we mean the participants' possible desire to give specific answers or behaviors to please the instructor, to prove superiority in class, totally separate from their real personality. In order to help control this, we designed the post training assessment to gradually move from inside the class room, to the external environment, either personal lives or the professional ones, this will appear clearly in the applications;

- training content bias was also one of our concerns. By this we mean that if we are studying the relation between knowledge increase and cooperation deployment, we needed to be sure that our training was not selling cooperation, and then that the results would be a direct logical impact. For that we designed our training in order to cover the different types of negotiation styles in a neutral manner, without encouraging or selling cooperation.

Appendix 2 - Coding methodology:

This appendix explains in very simple words how we analyzed our field work material. Our objective was to measure the participants' behavior during negotiation before and after the training to detect any change/evolution, if any. We referred to suggestions in the literature and chose the coding method that, based on our experience, would maximize the use of our material and give us the most valid and reliable output.

To start with we identified two types of coding schemes. They are described in table 1 of this appendix. Table 2 describes the coding process and table 3 the material which was coded.

Coding Scheme		
Type	Focus	Objective
Behavioral	<ul style="list-style-type: none"> - Outcomes - Relations 	To categories the participants as cooperative or competitive
Substantives	<ul style="list-style-type: none"> - Tactics - Strategies 	

Table 1, Coding Scheme

Coding Process	
Process	Description of the process
Focus of analysis	Theoretical driven with concepts identified in literature.
Frequency of unit	From field work material <ul style="list-style-type: none"> - Word level - Sentence level - Speaking turn level - Body language level
Temporal aspect	<ul style="list-style-type: none"> - Study of sequence - Analysis of negotiation phases

Table 2, Coding Process

Coded Material	
Material	Detail
Questionnaires	Three per participant
Observation sheets	For each participant during pre and post training phases.
Participants training exercises material (written presentations and answers to case studies or analysis of simulation games)	

Table 3, Coded Material

Let us now explain how the actual analysis organized. The values given to our field work material were constructed in a horizontal manner. Table 4 as represents this. It has as many lines as there are participants and as many columns as there are sources of material. Each source of material corresponds to an event we organized as part of our field-work (a questionnaire to fill in, a simulation game...). Each of the collected material, used as a measurement tool, is considered independently subject to bias and shortcomings. Due to this, each source of data, on its own, has limited meaning. But when all material output is triangulated this provides a more confident result. In other words, the field work material value is conceived in such way that data from all activities is compared and recouped in order construct a comprehensive profile per participant.

	Pre-training			Post-training		
	Questionnaires			Simulation Games	Simulation Games	Case Study Presentation
	1	2	3			
Participants						
X						
Y						
Z						

Table 4, Horizontal Analysis

Each activity was classified for each individual as either cooperative or competitive based on our coding scheme and process. The value attributed to each activity has an equal weight. For example, as shown in table 5, a majority of cooperative behavior occurrences will lead a participant to be coded as dominantly cooperative.

Example: Table code: (Cooperative = Y; Competitive = X)

	Pre-training			Post-training			Dominance	
	Questionnaires			Simulation Games			Case Study Presentation	
	1	2	3					
Participants	Y	Y	X	YYY	XYX	XY	Y	Y

Table 5, Participant Dominant Character Identification Illustration

By creating this multi-facet information about the same person we felt more confident about the global image we drew for each participant in identifying their dominant character. This explains why we choose the horizontal analysis which describes an individual across all activities and not the vertical one which describes all individuals based on one activity only. This also explains how we perceive the material we designed and how we interpret its results. In the same time it explains why the analysis focuses on certain material from a specific perception. For example: with regards to the simulation games analysis, the game results had no value to our research, all our attention was on the participants behaviors throughout the game. So the material analysis will not point out to game statistical results, but to behavioral observations that were analyzed versus literature driven variables to categorize the dominant behaviors. In other words the games were only an opportunity to stimulate behavior and this is what we focused on.

Appendix 3 – Design and content of the training

Content	Details
1) Instructions 2) Pre-training profiling 3) Pre-training gaming	<p>Designed so as to correspond to the “unfreeze” phase of Lewin’s (1997) proposed structure for training.</p> <p>Structure</p> <ol style="list-style-type: none"> 1. Agenda – structure – methodology – discussion 2. Self assessment <ol style="list-style-type: none"> i) Personal bargaining inventory ii) Communication competency scale iii) Trust scale iv) SINS scale 3. Applications <ol style="list-style-type: none"> i) Negotiation exercises ii) Role play / simulation games <p>Design issues</p> <ol style="list-style-type: none"> 1. Progressive increase in the level of complexity 2. Expose participants to information processing issues 3. Expose participants to relationship management issues <p>Objectives:</p> <ol style="list-style-type: none"> 1. Facilitate identification of negotiation behaviors 2. Gradually increase participant involvement to ease training integration 3. Make participants more receptive to training content.
1) The Harvard Book “negotiation” 2) Ury & Fisher publications (1999, 2001) 3) Roy Lwicky “the Essentials of Negotiation”	<p>Designed so as to correspond to the “introduction of knowledge” phase of Lewin’s (1997) proposed structure for training.</p> <ol style="list-style-type: none"> 1. The following topics were covered <ol style="list-style-type: none"> i) Types of negotiations ii) The key concepts iii) Preparation of a deal iv) Table tactics v) Barriers to an agreement vi) Mental errors vii) When relationship matters viii) Organizational negotiation ix) Negotiation skills 2. We reviewed two books <ol style="list-style-type: none"> i) Getting to Yes ii) Getting pass No 3. And we selected <ol style="list-style-type: none"> i) Three approaches to resolving disputes ii) The six habits of merely effective negotiators iii) Selecting a strategy iv) Can we negotiate and still be friends v) Taking the stress out of the conversation vi) Negotiating with problem people vii) Should you be a negotiator? viii) Best practice in negotiation
Four-level assessment and application to ensure retention of knowledge.	<p>Designed so as to correspond to the “unfreeze” phase of Lewin’s (1997) proposed structure for training.</p> <ol style="list-style-type: none"> 1) Class simulation games 2) Take home case study, individual work, followed by presentation 3) Real life negotiation, followed by presentation 4) Real life professional negotiation, followed by presentation